COVER SHEET

Teaching with Confidence: A pilot study of an intervention challenging pre-service education students' field experience anxieties.

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Most pre-service education students experience transient anxiety about becoming a teacher which decreases as knowledge and skills increase during training. However, some students express continuing anxiety which is distressing and inhibits their learning. This paper will discuss the results from a pilot study of an intervention called "Teaching with Confidence" that was offered to eighteen pre-service education students experiencing excessive anxiety about their teaching field experience at the Queensland University of Technology in Brisbane, Australia. Results from the pilot study demonstrated the need and the demand for interventions that address students' excessive anxiety about their practical experiences.

Keywords: pre-service student teachers, practicum, anxiety, teacher supervision

It has long been recognised that teacher education students (pre-service teachers) experience high levels of anxiety (Tibble, 1959), usually about being able to keep discipline and control the class (Hart, 1987). Some researchers have conceptualised pre-service teachers as passing through developmental stages of anxiety about becoming a teacher (Fuller, 1969) where it is assumed that anxiety will decrease as knowledge and skills develop during teacher training (Parsons, 1973). However, while this increased self-confidence towards teaching has been shown to apply to most pre-service students after four to five years of training, there were some students who did not exhibit confidence as a teacher even after this period (Ohnogi, 1996; Piggf & Marso, 1987).

Excessive anxiety is the most prevalent type of disorder experienced in the general population (Myers et al., 1984; Regier et al., 1984; Robins et al., 1984) and pre-existing anxiety disorders are often exacerbated in the stress of the field experience teaching period. It is known that some students demonstrate continuing excessive anxiety that is distressing and inhibits their learning. In fact, some teacher education students experience such excessive stress and anxiety during their practice teaching that they either withdraw from teaching or their learning and performance is seriously impaired. This is not surprising as it is known that excessive anxiety hinders learning (Cassady, 2004) and social competency (Hoffman, 2001). One of the most prevalent anxiety disorders is social phobia, which is defined as a marked and persistent fear of certain social or performance situations (Wittchen & Fehm, 2003). In fact, the main feature of this disorder is an unrealistic fear of negative evaluation (Mathew, Coplan, &

Gorman, 2001). This fear can be greatly exacerbated during field experience where it has been shown that the majority of student teachers are most concerned about evaluation (Capel, 1997; Morton, Vesco, Williams, & Awender, 1997). Greer and Greer (1992) hypothesised that individuals who are attracted to teaching often have personality traits which predispose them to unrealistic expectations and idealism leading to stress and, as with most anxious students, are often perfectionists with unrealistically high expectations (Miller & Fraser, 2000). The resulting stress has been shown to affect student teacher behaviour which reduces classroom effectiveness especially shown in poorer pupil achievement and increased levels of pupil anxiety (Murray-Harvey, Silins, & Saebel, 1999).

Not only do some students experience excessive anxiety because of their anxiety disorder, other groups of students also seem to be vulnerable to excessive anxiety during field experiences, such as non-English speaking background (NESB) students and mature age students. NESB students often experience problems with language, communication and cultural differences which impede their learning in their field experiences (Watts Pailliotet, 1997). Mature age students have what Kevern and Webb (2003) term, a double life load, as they continue to take responsibility for family and education. Additionally, they may go from competency in one career to incompetency when learning to teach (Duncan, 2000) which adds to their stress. Furthermore, in the field experience mature aged students often found acceptance by the supervisory teacher problematic, as they were either the same age or older than the teacher (Duncan, 2000). Thus, although field experience is viewed as “real life” teaching, most anxious students are so focussed on themselves, how they are going to control the class, and their own evaluation by others, that they miss the opportunity to reflect on what teaching and learning means in the bigger picture (Yourn, 2000).

While there are units offered at Queensland University of Technology dealing with the practicum, with an occasional lecture about handling stress, it is suggested that this is insufficient for some vulnerable students who need extra support. Two factors however, mitigate against this support being given. First, there is limited individual support from academic liaison officers because of work load and cost factors. Second, there is the reluctance by these students to access general support. Anxious students because of their embarrassment often do not seek the help available on campus from counsellors or tutors (Rickinson, 1998). Some NESB students are also reluctant to seek help outside their family and friends (Back & Barker, 2002).

Therefore, it is important to address excessive anxiety before and during field experience to increase both student retention and completion rates. Additionally, an intervention aiming to do this, could reduce the attrition rate in the first few vulnerable years of teaching (Manlove & Guzell, 1997). While offering benefits to individual student teachers, the intervention also hopes to provide suggestions for improving the experience of teachers who are transitioning to work. Ensuring teachers are well-supported and well-adjusted across their early years of teaching will also help to ensure that school students are

provided with a better learning environment, with benefits for their own future mental health and wellbeing.

Previous Interventions

Most research has targeted the stress of all pre-service teachers preparing for field experience with various strategies (Munday & Windham, 1995; Murray-Harvey et al., 2000; Romeo, 1985). Supervisors have provided student teachers with strategies to deal with their anxieties during the practicum by using self-reflection (Wadlington, Slaton, Partridge, 1998; Yourn, 2000), or observational learning or modelling with the supervising teacher acting as coach (Romeo, 1985; Wadlington et al., 1998). However, it is suggested that there are still some students who need more intensive support.

Many of these small group programs have been based on workshops (Wood, Willoughby, Specht, Stern-Cavalcante, & Child, 2002). In an English study, undergraduate students at risk of leaving in their first year of study were offered a series of four, half day workshops (Rickinson, 1998). The workshops were semi-structured and limited to 20 students to "share experiences, explore anxieties and gain support from the group" (p.96). In addition, two counselling sessions were provided. It is interesting to note that prior to receiving the questionnaire none of the students had sought help from any source, although the sources of help were well advertised. All students reported the workshops had helped them to develop strategies for managing their anxiety and all completed their degrees.

One intervention has directly targeted student teachers' anxious thoughts about field experience by a cognitive self-instructional procedure, altering their self-talk (Payne & Manning, 1990). Twenty-two student teachers reported that their anxiety about teaching decreased after the program. Another small group program targeting social problem-solving skills and managing emotional stress for student teachers was successful for reducing student teacher anxiety (Montgomery, 2003).

The intervention called *Teaching with Confidence* is based on cognitive behavioural therapy (CBT) principles that have been shown to be the most effective approach for reducing adult anxiety (Nathan & Gorman, 1998) and there is growing evidence, that CBT is also effective in reducing anxiety and stress for pre-service teachers (Sumsion & Thomas, 1995; Wilkins-Canter, Edwards, Young, Ramanathar, & McDougle, 2001). In addition, the intervention uses Interpersonal Process Recall (IPR), a technique first introduced in the early 1960's by Kagan, Krathwhol and Miller (Cashwell, 1994) to enhance the education and supervision of counsellors. It is an instructional method that uses videotaped counselling sessions to provide an opportunity for students to reflect on their feelings, attitudes and behaviour with a person trained in the recall process. This method maps onto CBT principles, enhancing reflection, making it an ideal technique to use in teacher education, especially with students with excessive anxiety.

The intervention consists of an all day introductory workshop followed by pairs of students meeting with a facilitator to view the videotapes of the students teaching, using IPR, for three sessions. A half day workshop in the university break and one more IPR session is held before field experience. During the field experience students are supported by email and telephone contact. A final debriefing session is then offered after the completion of the practicum. This paper reports on a pilot study of the recruitment and workshop phase of the intervention to see:

a) if the intervention was needed and would the students attend?
b) would the instruments measure student anxiety and any changes after the workshop?
c) and would the workshop balance anxiety reduction techniques and teaching skills to the satisfaction of the students?

Participants

Sixty-three self-identified anxious pre-service student teachers indicated their interest via email to volunteer for the study that had been advertised in a Student Guild magazine. Flyers of the workshop were also distributed and posted in various notice boards approved and supported by the university guild and the field service office. In addition, an email attachment from practicum unit course co-ordinators was sent to all pre-service student teachers. From the initial 63 enquirers by email, 25 students attended the information session and eighteen of these participants (15 female and 3 male) undertook the workshops. The ages of the participants were between 19- and 53-years-old. The 18 participants were divided into two groups based on days they were able to attend the workshop; eight students attended the Friday workshop, four female mature-age participants from NESB backgrounds, two mature-age Australian participants and two 19-year-old Australian female participants. There were 10 students who attended the Saturday workshop (two mature-age Australian male participants, and eight mature-age Australian female participants).

Table 1
Details of the 18 students who attended the workshops.

Postgraduate Students	**No of students**
1st year Early Childhood	1
2nd year Primary	1
2nd year Secondary	6
Undergraduate Students	
3rd year Early Childhood	1
3rd year Primary	2
4th year Primary	4
4th year Secondary	3

Materials

To ascertain levels of anxieties students were asked to complete the following three questionnaires prior to commencement of the workshop and again after finishing field experience.

State-Trait Anxiety Inventory

The *State-Trait Anxiety Inventory* (STAI; Spielberger, 1983) is a 40-item self-administered questionnaire designed to measure both state anxiety (transitory feelings, situation specific; 20 items) and trait anxiety (ongoing feelings, general; 20 items) in adults. The reliability coefficients for state anxiety range from .16 to .62 and for trait anxiety from .65 to .86. The lower reliability for state anxiety is expected as participant's responses on these items are dependent on situational factors at time of testing. This instrument is helpful in the screening of anxiety in tertiary students as well as evaluating the immediate and long-term outcome of counselling or behaviour modification programs. Both forms of the measure (state and trait) were used as it was predicted that state anxiety scores would be high before the practicum but would decrease significantly afterwards. It was anticipated that trait anxiety scores would not be as affected after the practicum, but show the results of the intervention.

Depression Anxiety Stress Scales

The *Depression Anxiety Stress Scales* (DASS), developed by Lovibond and Lovibond (1995), is a 42-item self-report instrument designed to measure three related negative emotional states of depression (14 items), anxiety (14 items) and stress (14 items). The reliability coefficient for the depression subscale is .91, .84 for the anxiety subscale and .90 for the stress subscale. The scores on the stress scale of the DASS were predicted to decrease markedly after the practicum (similar to the state scores), while the anxiety and depression scale scores were expected to decrease slightly. It was also predicted that the anxiety and depression scores would be positively correlated (Lovibond & Lovibond, 1995).

The Coping Scale for Adults

The Coping Scale for Adults (CSA; Frydenberg & Lewis, 1995) was based on and developed after extensive use of the Adolescent Coping Scale (Frydenberg & Lewis,1993). The CSA is an instrument that identifies coping behaviours adopted by individuals. The questionnaire focuses on what individuals do to cope rather than what they think they should do. The scale includes 74 questions which measure 18 coping strategies and an additional scale entitled "not cope" which contains questions related to not being able to deal with problems and the development of psychosomatic symptoms. The scale also contains one open response question. The reliability coefficients for the scales range from .69 to .92. The CSA is a research and clinical scale which helps identify the ways in which individuals cope with situations.

Other measures

Student academic transcripts and results of completed practicum in that year were also examined.

In addition, students completed an evaluation sheet at the end of the workshop which asked three questions:

1) What aspects of the workshop did you like?
2) What suggestions do you have to improve the workshop,
3) Any other comments or suggestions

The facilitator's comments on the workshop were also elicited.

Procedure

The pre-service student teachers were invited to attend an information session prior to the commencement of the workshop. In this information session they were briefed regarding the content that was to be covered and, in order to ascertain levels of anxieties were asked to complete the three questionnaires. A workshop was delivered in May, before the students commenced their four week field experience in June. The workshop was offered on two different days to participants and consisted of the following three parts;

1) Warm up - that covered both content and the process of teaching, theories on performance and general anxiety,
2) Personal Strategies used in teaching – this involved presentation skills, introduction to different relaxation strategies, understanding IPR
3) Empowerment – covering understanding personal power, mentoring.

All of the 18 students completed an evaluation form at the end of the workshop day. The three questionnaires were re-administered in September after completion of the field experience, however, only 10 students completed these, six from those who attended the Friday workshop and four from those who attended the Saturday workshop.

Results

Pre measures

The scores on all 25 self-identified anxious students were examined to ascertain whether the measures used were appropriate.

State-Trait Anxiety Inventory

On the STAI, 11 of the 25 self-identified anxious students obtained scores higher than one standard deviation from the mean for state anxiety. Two of these students did not attend the workshop. Ten students obtained scores higher than one standard deviation from the mean for trait anxiety and all of these students attended the workshop.

Depression Anxiety Stress Scales

For the DASS the cutoff scores that were used were those suggested by Lovibond and Lovibond (1995). One student questionnaire could not be used in the analysis as items had not been completed. For the anxiety scale 11 students were within the normal to mild range, four in the moderate range, six in the severe range and three in the extremely severe range. For the depression scale 15 students scored within the normal to mild range, four in the moderate range, four in the severe range and one in the extremely severe range. For the stress scale 14 students scored within the normal to mild range, six in the moderate range and four in the severe range. No students obtained extremely severe scores on the stress scale.

A further examination of the students who scored in the severe or extremely severe range on the DASS was conducted. On the depression scale the student who scored in the extremely severe range attended the workshop as did three of the four students who scored in the severe range. The student who did not attend the workshop did not have a practicum scheduled in that year.

On the anxiety scale of the DASS three students scored in the extremely severe range, one of these students attended the workshop and other two did not. The student who did attend the workshop also scored in the extremely severe range on the depression and stress scales. However this student did not have a practicum scheduled that year. Of the students who did not attend the workshop one completed a practicum satisfactorily and the other student was not enrolled in a practicum.

On the stress scale four students obtained scores in the severe range. Two students attended the workshop and two did not. The two who attended the workshop did not have a practicum. Of the students who did not attend the workshop, one did not have a practicum and the other completed the practicum satisfactorily.

The Coping Scale for Adults

Gender differences were found with males (M=65.00, SD=5.00) more likely to use the keep to self coping strategy than females (M= 53.18, SD= 19.97) t (23) = 2.297, $p < .05$.

Check with Robyn second M is SD?

A comparison of the overall mean scores obtained by participants and the mean results provided by Frydenberg and Lewis (1995) revealed some significant differences. The coping strategies that participants were more likely to use included humour (M=19.60, SD=7.87), physical recreation (M=17.45, M=8.24), seek spiritual support (M=15.96, M=5.49) or ignore the problem (M=16.61, M=6.51). Participants were also more likely to not cope with the problem (M=22.40, M=6.71) and less likely to focus on the problem (M=25.59, M=11.02).

Comparison scores on measures of workshop attendees and non attendees

Seven of students who attended the briefing session did not attend the workshop. A comparison of those who attended the workshop and those who did not revealed a significant difference for the measure of trait anxiety. Students who attended the workshop (*M*=50.33, *SD*=10.16) scored higher on trait anxiety than the students who did not attend the workshop (*M*= 39.14, *SD*= 8.49) *t* (23) = 2.794, $p < .05$.

Student Academic transcripts

Of the 25 students who completed the pre measures, four were not enrolled in practicum for that academic year.

Student and Facilitator Evaluations of the Workshop

Student evaluation sheets completed at the end of the workshops were read through and common themes identified. The transcript of the interview with the two facilitators was also analysed for common themes. Three themes emerged from the informants' descriptions on positives of the workshop and one from the negatives. Three themes emerged from the facilitator's comments.

Aspects of the workshop students liked

The first theme was that the interaction and sharing of ideas between group members was both highly useful as it was enjoyable. Anne exemplified this by stating that, "exchange of ideas from the whole group rather than a lecture style was useful and positive with lots of information given and explained, there was also a positive feel even when addressing negative topics." Rebecca wrote "being able to put a label on when I get worked up and knowing that there are others like me" was useful. "Comparing other students' concerns about prac" and "conversing with other students that are nervous about prac" were typical comments.

The second theme identified the usefulness of the practical suggestions, such as how to improve their confidence as well as learning to understand and cope with anxiety (such as breathing techniques and presentation skills). Sue found that "the strategies we were given for coping with anxiety were important for developing confidence". For participants like Sue, "talking in front of the group was helpful".

The theme concerned the sense of belonging in the non-intimidating environment developed by the workshop leaders. Dianne felt that the workshop leader "made the group feel a sense of togetherness", while Sue reported that she made "us all feel comfortable in sharing our thoughts and feelings". Ron commented that it "made us feel that we were normal and human." Importance was also placed on the teaching experience of the workshop leaders. Lyn for

instance felt it was important, “hearing from someone who had extensive experience’” or, as Shaun commented, “I liked hearing about real teaching experiences”, Mark commented he liked “hearing a teacher’s stories.”

Aspects of the workshop that students would improve.

The theme emerging from the negative comments on the workshop was that the students wanted more information. Some students wanted to take home information from the workshop such as “an outline of what was covered in the workshop”, while most students wanted more information on behavioural techniques in the classroom, “techniques for dealing with rebuttals from students when they ask a question and the teacher does not know the answer and techniques to get students attention at the start of the lesson” or negotiating the social context of the school, e.g. Lyn “information on how to handle other teachers, principals”. Others wanted more about what student teacher field experiences were really like, such as

> “A video showing a pre-service teacher’s teaching action in classroom, and then discussing which part is good and which part needs to improve, then each attender (sic) practice the same scenario and others watch and give feedback.”

Finally the students wanted the workshop to be repeated and more frequently - “perhaps the workshop could be run again next semester throughout a student’s course structure, even if it’s only once a semester. That way, an improvement in a student’s performance would be more evident”, while Ann even thought the workshop “should be made compulsory.”

Facilitators’ comments

The first theme identified from the facilitators was the success of the workshops. Both felt the workshops were well attended. They were impressed with the commitment of students coming to the workshop on a Saturday and staying all day and the enthusiasm and honesty which they showed. The second theme was the similarity of the student experience. They found that although each facilitator brought a different personality to her teaching, the tight structure of the workshop provided a good outline so that students received a similar experience. The third theme was the facilitators’ impression of the powerful learning that both groups of students experienced from the afternoon session. Realising that anxious students often have low self-esteem and are concerned about evaluation by the supervising teacher, they asked them to consider what power they brought to the supervisory relationship. All the students answered only in terms of the supervising teacher and how they ‘hoped’ the teacher would be supportive. None of the students understood about the concept of personal power and how to use this in the supervisory relationship. Both facilitators thought the role plays of the first meeting with the supervising teacher and the subsequent practice.

Comparison pre-post measures

Of the 18 students who completed the workshop only 10 completed post measures after they had completed the practicum. Six were from the Friday workshop and four from the Saturday workshop.

State-Trait Anxiety Inventory

For the 10 students who completed the workshop no significant differences were found in the pre and post STAI scores for either state or trait anxiety. Although not statistically significant the trait scores (pre *M*=47.70, *SD*=6.89) (post *M*=44.80, *SD*=9.28) decreased more than the state scores (pre *M*=45.50, *SD*=9.78) (post *M*=43.40, *SD*=9.76)

Depression Anxiety Stress Scales

There was a significant difference between the students' pre and post scores for the anxiety and stress scales of the DASS. Students were less anxious at post measures (*M*=5.00, *SD*=3.35) than pre measures (*M*=10.56, *SD*=5.92) t (9) = 3.134, $p < .05$. Students were also less stressed at post (*M*=12.60, *SD*=9.35) measures than pre measures (*M*=16.80, *SD*=7.32) t (9) = 2.701, $p < .05$.

The Coping Scale for Adults

For the coping scales only one significant difference was found between pre (*M*=72.80, *SD*=20.13) and post measures (*M*=60.20, *SD*=14.83) on the "not cope" scale t (9) = 2.250, p = .05. Students were less likely to use the not cope strategy after attending the workshop and completing the practicum.

Discussion

This pilot study investigated the recruitment and workshop phase of an intervention called *Teaching with Confidence* designed to assist excessively anxious student teachers in their field experience. The first question was if the intervention was needed and would students attend? It is clear from the number of students who enquired about the intervention that there is a need to provide additional support to highly anxious pre-service student teachers prior to their commencement of their field experience. In addition, it was shown that students would attend a day long workshop in their own time. However, there was a substantial attrition rate which will need to be addressed in the next iteration of the intervention.

The second question the pilot study sought to answer was if the instruments measure student anxiety and any changes after the workshop? It was shown that the instruments adequately measured the anxiety of the students who attended the briefing sessions, with half of the students scoring in the above average to extreme range of anxiety scores. Additionally, those students with higher anxiety scores completing the workshop more than those with lower scores. However, two of the measures, the State-Trait Anxiety Inventory and

the Coping Scale for Adults did not show any significant differences from the pre workshop to the post practicum administration. The Depression Anxiety and Stress Scale showed significant Time 1 and Time 2 differences on the anxiety scale and stress scale, which showed students were less anxious and stressed after the workshop and practicum, but there were no significant differences on the depression scale. It would seem therefore, that the DASS would be the better instrument to measure changes in anxiety after the intervention.

The third question the pilot study sought to answer was if the workshop balanced anxiety reduction techniques and teaching skills to the satisfaction of the students? From the student evaluations and the facilitators comments it would seem that the workshop was successful but that the students wanted the full intervention and not just the workshop.

Limitations and challenges

The lack of a control group was a design limitation in this pilot study. In future studies a control group will be created by offering one group of students an intervention based on CBT principles and IPR and a second group an intervention based on general support. In addition, generalisability of the results of the study is limited due to the small sample size and high attrition rate. Ensuring students' engagement will be a continuing challenge. This difficulty is probably a manifestation of anxious students not accessing help, in addition to the high incidence of depression. In future studies ways of encouraging anxious and vulnerable students to seek support, especially when studying at large institutions where they feel overwhelmed, is needed. Another challenge is how to cost effectively make the program sustainable as these students need small groups and facilitators who can respond sensitively to them. Furthermore, there is a difficulty with measuring the impact of any intervention on field experience as the result is only pass or fail. Therefore, qualitative data is needed to measure the impact of any intervention. The DASS would be used again and the Student Teacher Anxiety Scale (Hart, 1987) will be added. However, the recruitment strategies in this pilot study were effective and will be continued.

Conclusion

It seems from this pilot study that there is a need to provide additional support to highly anxious pre-service student teachers prior to the commencement of their field experience. This was shown by both the number of enquiries from students as well as the satisfaction ratings of those who attended the workshop. As Sumsion (2002) exhorts, there is a need to prepare students for the uncertainty of teaching, its 'emotionality' and the balancing of their class activities and the communal professional life of the school. If sustainable ways of alleviating some of the excessive anxiety these students face in their field experience it could enhance the quality of learning they provide to their future students and potentially reduce their own risk for stress-related work problems and early exit from the profession.

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